

MATERIAL SAFETY DATA SHEET

Trade Name: JOHN DEERE 80% S/F 7 OZ.
MSDS NO. RE33636
Revision Date: 11/21/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: JOHN DEERE 80% S/F 7 OZ.
Chemical Family: HYDROCARBON MIXTURE
Synonyms: Starting Fluid
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300

Supplier: Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLW STEL
1,1-Oxybisethane 60-29-7	80-90	400 ppm	Not Known	400 ppm	500 ppm
Propane 74-98-6	.1-10	1000 ppm	Not Known	2500 ppm	Not Known
Carbon Dioxide 124-38-9	5-10	5000 ppm (exposures <10,000 ppm to be cited de minimus)	Not Known	5000 ppm	30,000 ppm
Butane 106-97-8	.1-10	800 ppm	Not Known	800 ppm	Not Known
B200 Base Oil 64742-52-5	.1-10	Not known	Mist 5 mg/m3	TLV Mist 5 mg/m3 8 HR.	Not Known

3. HAZARDS IDENTIFICATION

Emergency Overview: Danger: Extremely flammable. Content under pressure. Keep away from heat, sparks and flame. "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes or skin.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Seek immediate medical attention.
Ingestion: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult. Do not give adrenaline, epinephrin or similar drugs following exposure to this product.
Skin Contact: Flush with warm water for at least 20 minutes. Treat for frostbite if necessary by gently warming affected area.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): -200F (Lowest Component)
Flash Point Method: Not Determined
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoignition Temperature °F(°C): 356F (Lowest Component)
Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical. Use water spray to keep containers cool that are exposed to heat or flames.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Carbon Dioxide. Carbon Monoxide. Fumes and Smoke. Aldehydes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Wear protective equipment specified. Avoid all sources of ignition; heat, sparks and open flames. Remove sources of ignition. Stop release at source. Dike area and contain.
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Do not allow entry to the atmosphere. Recover, reclaim or recycle when practical.

7. HANDLING AND STORAGE

Handling and Do not puncture, incinerate or store above 120 F. Exposure to high temperatures may cause bursting. Store in a cool, dry place,

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Storage: out of direct sunlight. Keep away from heat and open flame. Use only with adequate ventilation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Eyewash stations.
Eyes: Wear safety glasses or goggles to protect against exposure.
Skin Protection: Full protective clothing.
Respiratory Protection: Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colorless liquid	pH Value:	Not Determined
Odor:	ETHER-LIKE	Vapor Density (Air=1):	>1
Vapor Pressure:	Approx 180 PSI	Melting/Freezing Point:	Not determined.
Boiling Point (°F):	Approx -20F.	Bulk Density at 20°C:	Not Determined
Solubility in Water:	NEGLIGIBLE	Evaporation Rate:	Not Determined
Molecular Weight:	Mixture	Specific Gravity (H2O=1):	.700 --.730
Viscosity:	Not determined.	Decomposition Temperature:	Not Known
VOC Content(%):	Not determined.		

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of handling, use and transportation.
Conditions to Avoid: Keep away from heat, sparks and flame. Passing carbon dioxide over a mixture of sodium peroxide and aluminum or magnesium may explode. Temperature over 120 F. Do not store for long periods of time, or exceeding 6 months.
Materials to Avoid: Heat, sparks, flames and other sources of ignition. Nitric acid. Certain reactive metals, hydrides, moist cesium monoxide, or lithium acetylene carbide diamino may ignite. Strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc. , as this presents a serious explosion hazard.
Hazardous Decomposition Products: Smoke and Fumes. Carbon dioxide. Carbon monoxide. Other asphyxiants.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
1,1-Oxybisethane 60-29-7	80-90	Inhalation	Mice	LC50, 31000 ppm
Propane 74-98-6	.1-10	NA	NA	Not known.
Carbon Dioxide 124-38-9	5-10	NA	NA	Not known.
Butane 106-97-8	.1-10	Inhalation	Rats	LC50, 658 gm/m3/4H
B200 Base Oil 64742-52-5	.1-10	NA	NA	Not known.

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
1,1-Oxybisethane 60-29-7	80-90	Group Unspecified (Anaesthetics, volatile)	Not Listed	Not Listed
Propane 74-98-6	.1-10	Not Listed	Not Listed	Not Listed
Carbon Dioxide 124-38-9	5-10	Not Listed	Not Listed	Not Listed
Butane 106-97-8	.1-10	Not Listed	Not Listed	Not Listed
B200 Base Oil 64742-52-5	.1-10	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

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Not determined.

13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.

Waste Management: Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name: ORM-D CONSUMER COMMODITY
Hazard Class: ORM-D
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Aerosols (Limited Quantity)
Hazard Class: 2.1
Hazard Subclass: Not Determined
UN No.: UN 1950
Packing Group: Not Applicable
Marine Pollutant: Not determined.

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
1,1-Oxybisethane 60-29-7	80-90	Not Listed	Not Listed	NA	NA
Propane 74-98-6	.1-10	Not Listed	Not Listed	NA	NA
Carbon Dioxide 124-38-9	5-10	Not Listed	Not Listed	NA	NA
Butane 106-97-8	.1-10	Not Listed	Not Listed	NA	NA
B200 Base Oil 64742-52-5	.1-10	Not Listed	Not Listed	NA	NA

SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
1,1-Oxybisethane 60-29-7	80-90	Not Listed	Not Listed	Not Listed	Not Listed
Propane 74-98-6	.1-10	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Dioxide 124-38-9	5-10	Not Listed	Not Listed	Not Listed	Not Listed
Butane 106-97-8	.1-10	Not Listed	Not Listed	Not Listed	Not Listed
B200 Base Oil 64742-52-5	.1-10	Not Listed	Not Listed	Not Listed	Not Listed

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U.S. TSCA: The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

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